

ACCESSION NR: AP4013101

S/0126/64/017/001/0142/0144

AUTHOR: Ivanov, V. Ye.; Nechiporenko, Ye. P.; Zniy, V. I.; Glushko, P. I.; Aleksandrov, O. N.; Dorokhov, V. I.

TITLE: High-temperature oxidation of molybdenum disilicide.

SOURCE: Fizika metallov i metalloved., v. 17, no. 1, 1964, 142-144

TOPIC TAGS: molybdenum, silicon, molybdenum disilicide, molybdenum disilicide oxidation, molybdenum disilicide microhardness

ABSTRACT: Molybdenum disilicide is a metal with great promise for use in structures designed to withstand high temperatures. In the technical literature there are data on the oxidation of MoSi_2 achieved by various methods: hot pressing, sintering etc. The authors of this short article conducted a study of the kinetics of MoSi_2 oxidation in a temperature interval of 1400-1700C using a high-temperature resistance furnace. The heater was a spiral 5mm in diameter made from a molybdenum rod. For oxidation, samples of molybdenum disilicide 25X10X0.15 mm in size were used; these samples were obtained by the vacuum method. The temperature was controlled by a thermocouple (Pt - Rh 7% center; Pt-Rh 20%) and an optical pyrometer, the latter placed directly on the heater. The temperature gradient between the heater

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ACCESSION NR: AP4013101

and the sample was not more than 30C. A metallographic analysis of the sample was carried out with an MM-7 microscope, with microhardness tested on a FMT-3 instrument. Oxidation time was 10 hours. It was found that with increasing time and temperature the oxidizability of MoSi_2 increases, the rate of oxidation obeying a parabolic law. No transition from a parabolic law of oxidation to a logarithmic one was detected in the tests. X-ray analysis in the temperature range indicated (1400-1700C) revealed an amorphous oxide film on the surface of the oxidized samples. Preliminary analysis showed that this film, in addition to SiO_2 , contains unknown components. These are, apparently, lower molybdc oxides, the vapor tension of which is lower than that of MoO_3 . The microhardness of the molybdenum disilicide, which did not change during the oxidation process, was 1200 kg/mm². Orig. art. has: 3 figures.

ASSOCIATION: Fiziko-tekhnicheskii institut AN USSR (Physicotechnical Institute, AN UkrSSR)

SUBMITTED: 03Mar63

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: ML

NO REF SOV: 005

OTHER: 003

Card 2/2

L 27562-66 EWT(m)/EWP(t) IJP(c) JD/JG/WB	
ACC NR: AP6017688	SOURCE CODE: UR/0363/65/001/008/1360/1363
AUTHOR: <u>Ivanov, V. Ye.; Nechiporenko, Ye. P.; Krivoruchko, V. M.; Zmiy, V. I.; Mitrofanov, A. S.; Aleksandrov, O. M.</u> 4/B	
ORG: <u>Physicotechnical Institute AN UkrSSR (Fiziko-tekhnicheskij institut AN UkrSSR)</u>	
TITLE: <u>Oxidation of tungsten disilicide at 1500-1800°C temperatures</u>	
SOURCE: AN SSSR. ¹⁸ Izvestiya. ²⁷ Neorganicheskiye materialy, v. 1, no. 8, 1965, 1360-1363	
TOPIC TAGS: tungsten compound, silicide, oxidation kinetics, silicon, molybdenum compound	
ABSTRACT: The authors carried out an investigation of the oxidation kinetics of tungsten disilicide over the temperature range 1500-1800°C. Tungsten of 99.95% purity and 99.999% pure silicon were used for the investigation. The oxidation kinetics curves are parabolas. The effects of preparation temperature and homogenization time of tungsten disilicide specimens on their oxidation rate was studied. It was shown that the oxidation rate of WSi_2 at 1500-1700°C is approximately the same as that for $MoSi_2$. It is even somewhat lower than that for $MoSi_2$ at 1800°C. Orig. art. has: 2 figures and 2 formulas. [JPRS]	
SUB CODE: 07 / SUBM DATE: 24May65 / ORIG REF: 003 / OTH REF: 005	
Card 1/1 A.C.	UDC: 546.78'281

UGLOV, F.G.: professor; STUKKEY, A.L., dotsent; ALEKSANDROV, O.V.;
VORONOV, A.A.

Hypothermia in thoracic surgery. Vest.khir. 76 no.7:35-48 Ag '55.

1. Iz gosital'noy khirurgicheskoy kliniki (zav.prof. F.G. Uglov)
1-go Leningradskogo meditsinskogo instituta im. I.P.Pavlova.

(THORAX, surg.

controlled hypothermia in)

(BODY TEMPERATURE

hypothermia, in surg. of thorax)

ALEKSANDROV, O. V.

"Anesthetization During Operations on the Heart and Pericardium," by Prof F. G. Uglov, Docent A. L. Stukkey, A. A. Voronov, and O. V. Aleksandrov, Hospital Surgical Clinic (head, Prof F. G. Uglov), First Leningrad Medical Institute imeni I. P. Pavlov, Vestnik Khirurgii, Vol 77, No 10, Oct 56, pp 3-11

The authors performed 96 operations connected with adhesive pericarditis, mitral stenosis, congenital heart defects, etc., and assess the different methods of inducing and maintaining analgesia that were employed.

Hypothermia is considered the best method for "blue baby" heart defects, while for developmental heart defects combined anesthesia (barbiturates plus ether-oxygen narcosis) combined with ganglioplegic and hypotonic drugs is best.

Local anesthesia seems satisfactory during parasternal sectioning in operations connected with adhesive pericarditis, while in cases of bilateral pneumothorax one is forced to resort to intratracheal narcosis and "controlled" respiration.

The above-described methods of combined anesthesia shorten the period of excitement and lessen hypoxia. (U)

Sum. 1360

USSR / Human and Animal Physiology. Thermoregulation.

T

Abs Jour : Rof Zhur - Biol., No 15, 1958, No. 69957

Author : Aleksandrov, O. V.

Inst : Not given

Title : Oxyhemometry in Hypothermia

Orig Pub : Eksperim. khirurgiya, 1957, No 3, 51-55

Abstract : Observations were made of changes in the O₂ saturation of blood in operations on the lungs and heart under hypothermic conditions. With the attainment of deep anesthesia at the time of intubation, varying degrees of arterial hypoxemia were noted. In accordance with the degree of reduction of arterial O₂ saturation, the patients were divided into the following groups: I - to six percent below the original level, II - to 11 percent below, and III - lower than 11 percent below normal. In the first stage of anesthesia the content of oxyhemoglobin increased

Card 1/3

USSR / Human and Animal Physiology. Thermoregulation.

T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 69957

patients was unchanged or dropped no more than one or two percent. The decline in the percentage of oxyhemo-
globin was due to increased muscle tonus during cooling,
collapse of the lungs, manipulations in the area of the
left atrium, disruption of bronchial patency, constriction
of pulmonary vessels, etc. -- F. I. Mumladze

Card 3/3

L

ALEKSANDROV, O.V. Cand Med Sci -- (diss) "~~The~~ Oxyhemometry in ~~the~~
anesthetization during ~~the~~ ^{thoracic operation} intrapleural surgery." Len, 1958. 16 pp
(First Len Inst in Academician I.P. Pavlov). 200 copies.
(KL, 37-58, 112).

- 27 -

ALEKSANDROV, O. V.

EXCERPTA MEDICA Sec 9/Vol 13/5 SURGERY May 59 958,

2353. THE VALUE OF OXYHAEMOMETRY DURING ANAESTHESIA IN INTRA-THORACIC OPERATIONS (Russian text) - Alexandrov O. V. - VESTN. KHIR. 1958, 80/3 (97-103) Graphs 2 Tables-2

The data of 135 oxyhaemometric estimations carried out during 62 pleuropulmonary interventions, 57 operations in congenital and developmental heart lesions, 15 for adhesive pericarditis and 1 for cardiospasm are described. Oxyhaemometric readings in different methods of inducing anaesthesia and performing intubation demonstrated the blood oxygen saturation to be most stable in cases when, preceding the operation, the patient was given oxygen (1-2 l. per min.) for 2-3 min. to be followed by i. v. administration of 2.5% thiopental sodium and 1 to 2.5% of dithylinum solution. The use of assisted or controlled respiration in operations for developmental heart lesions was found to be a potent aid in prophylaxis and treatment of hypoxaemia. When the administration of oxygen had ceased and normal respiration began, there was a notable decrease of oxyhaemoglobin (from 6 to 14%). This finding calls for postoperative use of oxygenotherapy from the first minute on.

ALEKSANDROV, O.V.

Normal vectocardiography and its variants in human subjects of various
ages. Terap. arkh. 32 no. 7:40-42 J1 '60. (MIRA 14:1)
(VECTOCARDIOGRAPHY) (AGING)

ALEKSANDROV, O.V.; LOKTEV, V.Ye. (Maloyaroslavets)

Case of ectopic chorioepithelioma of the liver in a man. Klin.
med. 40 no.10:116-118 O '62. (MIRA 15:12)

1. Iz Maloyaroslavetskoy rayonnoy bol'nitsy (glavnyy vrach --
P.A.Khachikyan).

(LIVER--CANCER)

L 63955-65 ETT(1)

ACCESSION NR: AP5016053

UR/0368/65/002/005/0473/0475
535.853.94

AUTHOR: Aleksandrov, O. V.; Gofren, M. V.; Keylina, T. A.; Tveryankina, R. I. (Deceased)

TITLE: Monochromators for the ultraviolet and visible regions of the spectrum

SOURCE: Zhurnal prikladnoy spektroskopii, v. 2, no. 5, 1965, 473-475

TOPIC TAGS: monochromator, monochromatic radiation, optical equipment

ABSTRACT: The article is the text of a paper read at the Sixteenth Conference on Spectroscopy, 2 February 1965. Two new monochromators with diffraction gratings, developed by the Leningrad Society of Opticomechanical Enterprises, are described. The VMR-2 vacuum monochromator is designed for monochromatic radiation in the 500-2500 Å range and may be used for measuring the reflection and transmission coefficients of various materials, and also for studying light sources. The device uses an aluminized concave diffraction grating with 600 lines per mm and a radius of curvature of 1 m. Relative aperture of the system is 1:16; linear dispersion is 16 Å/mm. Measurements may be made at angles of incidence of 12, 30, 45, and 70°. Measurement error is 1.0-1.5%. The MDR-2 monochromator is a high-trans-

Card 1/2

L 63955-65

ACCESSION NR: AP5016053

mission instrument designed for isolation of monochromatic radiation in the ultra-violet, visible, and infrared regions of the spectrum. The device is used primarily as a source of monochromatic emission for excitation of luminescence spectra and also for studying various sources of radiation. The working range of the device is 0.2—2.5 μ . Three replaceable flat diffraction gratings are used with 1200, 600, and 300 lines per mm. The relative aperture is 1:2.4. The objective is a parabolic mirror with a focal length of 400 mm. Light scattering is less than 5% for the 2500 Å region. These monochromators should be on the market in 1966. Orig. art. has: 2 figures. [14]

ASSOCIATION: Leningradskiye ob'yedineniye optiko-mekhanicheskikh predpriyatiy (Leningrad Society of Opticomechanical Enterprises)

SUBMITTED: 00

ENCL: 00

SUB CODE: OP

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4071

Card 2/2

ALEKSANDROV, P.

USSR/Chemical Technology. Chemical Products and Their Application -- Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5283

Author: Aleksandrov, P., Bogautdinova, G., Kuntsevich, S., Ratnov, V.,
Rozenberg, T., Stalikova, G.

Institution: All-Union Scientific Research Institute of Reinforced Concrete,
Leningrad Institute of Railroad Transport

Title: New Testing Methods for Building and Molding Gypsum

Original

Publication: Stroit. materialy, izdeliya i konstruktsii, 1956, No 5, 31-33

Abstract: Work conducted by VNIIZhelezobeton and the Leningrad Institute of Railroad Transport, has shown that termination of the processes of hydration and crystallization of gypsum coincide in time. The hardening process is divided into two periods: end of the first is determined, not accurately, by means of the needle of Vick, as "termination of setting," and the end of the second (13-17 minutes) is the "end of crystallization." It is appropriate to evaluate the kinetics of hardening (setting time, end of crystallization) from the value of exothermy or volumetric changes.

Card 1/1

ALEKSANDROV, P. (g.Rostov-na-Donu)

Briquetting metal chips. NTO no.6:39 Je '59.

(MIRA 12:9)

1.Uchenyy sekretar' Rostovskogo oblastnogo provleniya nauchno-
tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti.
(Briquets)

AUTHOR: Aleksandrov, P. SOV/95-59-2-15/13
TITLE: A Necessary and Useful Book (Nuzhnaya i poleznaya kniga)
PERIODICAL: Stroitel'stvo truboprovodov, 1959, Nr 2, pp 32-33 (USSR)
ABSTRACT: The article represents a critical review of the book "Welding of Main and Plant Pipelines" by A.S. Fal'kevich, published by the Gostoptekhizdat" in Moscow. Though it appears that the author omits to offer in his book adequate reasons for his preference of certain methods of welding over the others, the comment as a whole is very favorable, as the title indicates in summing up the book as being necessary and useful information. It is regretted that the book says nothing on the welding of non-metal pipes and the methods of joining non-metal pipes, such as are likely to be used in the near future.

Card 1/1

ALEKSANDROV, P.; BUGAYEV, G.; KOBRINSKIY, S.

Conference in factories. NTO 2 no.7:58 J1 '60.
(MIRA 13:7)

1. Uchenyy sekretar' Rostovskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva mashproma (for Aleksandrov).
2. Starshiy inzhener golovnogho Spetsial'nogo konstruktorskogo byuro (for Bugayev).
(Machinery industry--Technological innovations)

Aleksandrov, P.

N/5
722.1
.A3

Leninsko-Stalinskaya teoriya kollektivizatsii sel'skogo khozyaystva i bor'ba
partii za ego osushchestvleniye (Lenin-Stalin theory of collectivization of agriculture
and the struggle of the party for its realization) Moskva, Gospolitizdat, 1951.
65 p.

ALEKSANDROV, P.

Fuel

Fuel economy in agriculture. Za ekon. mat. No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

ALEKSANDROV, P.

Aleksandrov, P. Leninsko-stalinska teoria kolktivizacie pol'nohospodarstva a boj strany za jej uskutenenie. (1. vyd.) Bratislava (Slovenske vydavatel'stvo politickej literatury) 1953. 75 p. (Politicka ekonomia) (Leninist-Stalinist theory of collective agriculture and the struggle of the Party for its realization. Tr. from the Russian. 1st ed.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 11, Nov. 1955, Uncl.

ALEKSANDROV, P.

Mechanized feed plant of the "Luch" Collective Farm. Sel'.stroil. 11
no.2:11-12 F '56. (MLRA 9:7)

1.Inzhener otдела po stroitel'stvu v kolkhovakh, Krasnogorskogo rayona,
Moskovskoy oblasti.
(Feed mills)

ALEKSANDROV, P.

A primary organization at every enterprise. NTO 3 no. 5:43-44 My '61.
(MIRA 14:5)

1. Uchenyy sektretar' Rostovskogo oblastnogo pravleniya nauchno-
tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti.
(Rostov Province—Machinery industry)

ALEKSANDROY, P.A.; ESTROV, Z.I.; GRADOV, G.A., kandidat arkhitektury,
redaktor; PALLADINA, G.A., redaktor; MEDVEDEV, L.Ya., tekhnicheskii
redaktor.

[Hospital buildings; proposals for planning standard designs of
hospital buildings for industrial construction] Bol'nichnye zdaniia;
predlozheniia po tipovomu proektirovaniu bol'nichnykh zdanii in-
dustrial'nogo stroitel'stva. Moskva, Gos. izd-vo lit-ry po stroit.
i arkhitektуре, 1954. 51 p. (MLRA 8:1)
(Hospitals--Construction)

ALEKSANDROV, P.A., kand.arkhitektury; GROMOVA, N.M., kand.farmatsevticheskikh nauk; KAPITSA, N.K., arkhitektor; SAMSONOV, G.A., arkhitektor; DANOVSIIY, V.F., arkhitektor, nauchnyy red.; OSELEDETS, Z.M., red. izd-va; GILSON, P.G., tekhn.red.

[Auxiliary therapeutic departments of general hospitals; manual on the planning of pharmacies, laboratories, and physical therapy departments] Lechebno-vspomogatel'nye otdeleniia bol'nits obshchego tipa; posobie dlia proektirovaniia aptek, laboratorii, fizioterapevticheskikh otdelenii. Moskva, Gos.izd-vo lit-ry po stroit., arkh. i stroit.materialam, 1960. 122 p. (MIRA 14:2)
(HOSPITALS--CONSTRUCTION)

ALEKSANDROV, P. A.

PA 153T31

USSR/Engineering - Heating, Industrial
Industrial Economy

Nov 49

"Utilization of the Heat in Low-Temperature Waste
Water for Heating Plants and Dwellings," P. A.
Aleksandrov, N. M. Zabludovskiy, M. Sh. Lyakhovitskiy,
Yu. K. Matseyevskiy, A. A. Shibayev, Power Eng Div.,
NII, 1 p

"Prom Energet" No 11

Awarded third prize in 1948 All-Union Competition.
Warm cooling water from the plant, instead of being
wasted, is piped to central heating installation,
where it passes through heat exchanger and is then
recirculated at the plant. Includes diagram.

153T31

AUTHORS: Valitov, R.A., and Aleksandrov, P.A.

115-5-29/44

TITLE: Ponderomotive Rebound Force at Radiation of Electromagnetic Energy, and Utilization of it for the Purposes of Measurement (Ponderomotornaya sila ot dachi pri izluchenii elektromagnitnoy energii i vozmozhnost' ispol'zovaniya eye dlya izmeritel'nykh tseley)

PERIODICAL: "Izmeritel'naya Tekhnika", No 5, Sep-Oct 1957, pp 67-68 (USSR)

ABSTRACT: The mechanical rebound moment created by the radiation of electromagnetic energy from a dipole or vibrator was experimentally studied and the possibility of utilizing the phenomenon for the purposes of measurements is discussed. Information on new measuring instruments based on this principle is referred to as given in the Soviet and foreign literature during the past years. The technology of experiments, with optic measurements of the twist angle (of an antenna) is described in detail. It was concluded that the system is most sensitive when placed into an absorbing cylindrical screen. The circular symmetry of ambient space provides for a constant sensitivity when the system is being rotated. The involved computation equations are derived. As considerable errors are possible in determination of two coefficients used

Card 1/2

115-5-29/44

Ponderomotive Rebound Force at Radiation of Electromagnetic Energy, and
Utilization of it for the Purposes of Measurement

in the equations, the method is considered applicable for relative measurements only. As an example of application, there is mentioned the graduation of attenuators in the range of several milliwatt to ten times that number. Measuring the dielectric constant of gases is mentioned as another example. The angle twist, φ_1 and φ_2 , when placed in dry air and in gas respectively, is calculated. It is presumed that some advantages of the method will be utilized in devising instruments for measurements of superhigh frequencies. There are 3 diagrams and 4 references (2 of which are Russian)

AVAILABLE: Library of Congress

Card 2/2

MOROZOV, B.M., dots., glav. red.; ALEKSANDROV, P.A., prof., red.; RYAB-
TSEV, I.G., dots., red.; RADZHABLI, D.S., red.; NAUMOV, K.M., tekhn.
red.

[CPSU, the organizer of the struggle for the rapid expansion of agri-
culture] KPSS - organizator bor'by za krutoi pod'em sel'skogo kho-
ziaistva. Moskva, Izd-vo VPSH i AON pri TsK KPSS, 1960. 359 p.
(MIRA 14:12)

1. Moscow. Akademiya obshchestvennykh nauk.
(Agriculture)

PRECISE AND PROPERTIES INDEX									
ALEKSANDROV, P. A.									
<p>Use of calcium babbitt for merchant mill bearings. P. Aleksandrov and M. Igon'kin. <i>Stal</i> 6, No. 6, 11-21 (1934) - Good results are obtained with a lead-base alloy contg. Cu 0.75-1.10, Na 0.70-1.10 and Sb < 0.5% if the alloy is protected from oxidation while melting and cast at 550-600°.</p>									
H. W. Rathmann									
ASME-STEEL METALLURGICAL LITERATURE CLASSIFICATION									

ALEKSANDROV, P. A.																									
S													11												
<p>Production of Telegraph Wire from Armco Iron. P. A. Aleksandrov and S. I. Usov. (Metallurgist, Russia, 1937, vol. 12, No. 4, Apr., pp. 91-103). (In Russian). The electrical resistance of Armco-iron wire is lower than that of steel wire (0.110 ohm per sq. mm. per m.). Intermediate annealing during the drawing of Armco wire is inadvisable, owing to the possibility of free cementite being produced, and rolling should not be carried out below the upper limit of the brittle range. This latter point is further emphasised by M. Kolesnikov in the discussion appended to the paper.</p>																									
<p>ASM-A METALLURGICAL LITERATURE CLASSIFICATION</p>																									

ALEKSANDROV, P. A.																									
COMMON ELEMENTS													COMMON VARIABLES												
<p>Improving the Roll Pass Design of Three-High Blooming Mills. P. Alexandrov. (Stal, 1938, No. 4, pp. 33-42). (In Russian). A critical examination of data regarding blooming-mill roll pass design at a number of Russian works leads the author to some general conclusions regarding the design of such rolls. The possibilities of improving some of the roll pass designs examined are pointed out.</p>																									
<p>APP-51A METALLURGICAL LITERATURE CLASSIFICATION</p>																									
<p>GROUPS</p>																									

ALEKSANDROV, P.A.

26168 Aleksandrov, P.A. Ivanovskaya Ploshchad' Moskovskogo Kremlya. Arkhitektura
Obshchestv. Zdaniy, 1, 1948, S. 2-16.

SO: Letopis' "hurnal Statey, No. 30 Moscow 1948

ALEKSANDROV, P.A., kand.tekhn.nauk

Contradictions in modern trends of improving the design of
blooming mill and ways to solve them. Obr.met.davl. no.2:76-92
'53. (MIRA 12:10)

1. Ukrainskiy institut metallov.
(Rolling mills)

ALEKSANDROV, P.A., kandidat tekhnicheskikh nauk; TRISEVSKIY, I.S.,
inzhener.

Efficient method of gauging rails. Stal' 15 no.12:1112-1115
D '55. (MLRA 9:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov.
(Rolling (Metallwork)) (Railroads--Rails)

Aleksandrov, P. A.

137-1957-12-23697D

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 123 (USSR)

AUTHOR: Aleksandrov, P. A.

TITLE: Contradictions in the Modern Trend in the Development of Blooming Mills and Ways for Their Resolution (Protivorechiya v sovremennom napravlenii razvitiya blyumingov i puti razresheniya ikh)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Doctor of Technical Sciences, presented to the Institute of Metallurgy of the Academy of Sciences of the USSR (In-t. metallurgii AN SSSR), Moscow, 1956.

ASSOCIATION: Institute of Metallurgy, Academy of Sciences, USSR
(In-t metallurgii AN SSSR), Moscow.

1. Blooming mills-Development 2. Critic

Card 1/1

Aleksandrov, P. A.

137-58-2-2791

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 84 (USSR)

AUTHOR: Aleksandrov, P. A.

TITLE: Ways of Developing Large New Duplex Blooming Mills (Puti razvitiya novykh bol'shikh sdvoyennykh blyumingov)

PERIODICAL: Tr. nauchno-tekhn. o-va chernoy metallurgii. Ukr. resp. pravl., 1956, Vol 1, pp 27-43

ABSTRACT: Existing blooming mills have the following disadvantages: 1) low output capacity (up to 2 million tons); 2) the limitation they impose on the size and weight of the ingots to be rolled, an impediment to the building of steel works with a 5-million-ton annual capacity; 3) unfavorable stress conditions during reduction of the ingots, which impair the quality of the heavy-gage rolled pieces and are the cause of axial porosity, cobweblike or star-shaped cracks, and pigeon holes. These defects cannot be eliminated through any changes in the conditions of rolling---except by increasing the reduction. Achievement of normal ingot reduction on the blooming mills, free of longitudinal tensile stresses and sources of internal flaws, requires adherence to the ratio $H:l_d < 2$. To attain this ratio

Card 1/2

137-58-2-2791

Ways of Developing Large New Duplex Blooming Mills

the diameter of the rolls must be increased; this in turn sharply increases roll productivity. A list is given of the requirements which a modern blooming mill should satisfy. It should be of the duplex type; its first stand should have rolls with a nominal diameter of 1650 mm; the rolls of the second should have an 1150 diameter; both stands should have vertical rolls. Included is a general plan of arrangement for a blooming mill and slab mill which satisfies the stipulated requirements and which will afford a unit output of 6.8 million tons per year.

P.G.

1. Rolling mills--Development

Card 2/2

ALEKSANDROV, P. A.

137-58-2-2853

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 93 (USSR)

AUTHOR: Aleksandrov, P. A.

TITLE: The Principles of Groove Design for Blooming-mill Rolls and the Ingot Deformation Process (Printsipy kalibrovki valkov blyumingov i usloviya deformatsii slitkov)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii, 1956, Vol 10, pp 326-342

ABSTRACT: An analysis of present-day blooming-mill groove designs and reduction processes revealed that to obtain good-quality blooms and billets it is necessary to increase blooming-mill and roughing-mill roll diameters and to increase reduction simultaneously. See RzhMet, 1957, Nr 12, Abstract 22805.

M. Z.

1. Rolling mills--Rolls--Design

Card 1/1

SOV/124-58-7-8007

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 7, p 101 (USSR)

AUTHORS: ~~Aleksandrov, R.A.~~ Dolzhenkov, F.Ye.

TITLE: Some of the Laws Governing Plastic Deformation in Metals
Subjected to Compression (Upsetting) [Nekotoryye zakonomernosti plasticheskoy deformatsii metallov pri szhatii (osadke)]

PERIODICAL: Byul. nauchno-tekhn. inform. Ukr. n.-i. in-t metallov,
1957, Nr 2, pp 49-62

ABSTRACT: Bibliographic entry

1. Metals--Deformation 2. Metals--Compression

Card 1/1

ALEKSANDROV, Pavel Aleksandrovich (Ukr Sci-Res Metals Inst) awarded sci degree of Doc Tech Sci for the 9 May 57 defense of dissertation: "Contradictions in the present-day direction of the development of blooming mills and the path to their solution" at the Council, Inst of Metallurgy imeni Baykov, AS, USSR; Prot No 15, 7 Jun 58.
(BMVO, 11-58,27)

ALEKSANDROV, P.A.

ALEKSANDROV, P.A.

1A(5); 25(5) PAGE 1 BOOK REPRODUCTION 808/1571

Rylov. Ultrasonic'lyz moshno-kollidnyy instyut metallurgii

Vvedeniye v nauku i tekhnologii v metallurgii i avtomaticheskoye upravleniye, t. 3 (Introduction of New Techniques and Technology in Metallurgical Plants; Collection of Articles, Vol. 3) Rylov, Dnepropetrovsk DZS, 1978. 192 p. 1,000 copies printed.

Revis. M.: Z. Izhmash; Mosk. M.: P. Petalynsk.

PURPOSE: The book is intended for metallurgists employed in rolling and slabbing operations.

COMMENT: This is a collection of 11 Ukrainian articles, compiled by 22 authors, and is intended for metallurgists. The subjects dealt with in the articles are: use of limestone-fluxed slag in making pig iron, use of blast-furnace gas under increased pressure, use of oxygen in making steel in open-hearth and Bessemer furnaces, description of a new method of "intensified" squeezing of slabs in blooming mills. Some design details, with direct references to actual plants and certain operational practices are also featured. Introduction of full mechanization of rolling processes at steel-works is taking place. Numerous diagrams accompany the text. Some articles have bibliographic entries, mainly Soviet.

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Introduction of New Techniques (Cont.)

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Card 3/3

25(1) PHASE I BOOK EXPLOITATION SOV/2132
Kiyev. Ukrainskiy Nauchno-issledovatel'skiy institut metallor
Tekhnologiya proizvodstva i svoystva chernykh metallov; sbornik
(The Manufacture and Characteristics of Ferrous Metals; a collection
of articles) Kharkov, Kharkovskiy gos.univ. im. A.M. Gorkogo,
1958. 271 p. (Series: Its: Trudy, vyp. 4) Errata slip in-
serted. 1,000 copies printed.
Editorial Staff of this book: P.A. Aleksandrov, D.S. Kazarnovskiy,
M.I. Kuratov, N.P. Lova, V.P. Omorlyanko, V.A. Tikhovskiy, and
Ya. A. Shneyerov; Ed.: S.S. Liberman; Tech. Ed.: K.O. Gurin
PURPOSE: The book is intended for the scientific personnel of
institutes and for engineers and technicians of metallurgical
enterprises and other branches of the industry.
COVERAGE: The collection of articles reviews the work carried on at
the Institute of Metals on the technology of blast furnaces, open-
hearth furnaces, and rolled stock production. It also deals
with problems in metallurgy, heat treatment of ferrous metals
and methods for their study. Particular attention is devoted to:
the preparation of charges and blast furnace practice with increased
gas pressure, open-hearth production with oxygen blast, and rolling
of light profiles. No personalities are mentioned. References
accompany each article.

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Card 4/6

(1)

ALEXSANDROV, P. A.

18(0) PHASE I BOOK REPRODUCTION SOV/1728

Abadentya nauk SSSR. Institut metallurgii

Sovremennyye problemy metallurgii (Modern Problems in Metallurgy)

Moscow, Izd-vo AN SSSR, 1958. 840 p. 3,000 copies printed.

Red. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of

Sciences; Eds. of Publishing House: V.S. Nabernikov, and

A.I. Bernov; Tech. Ed.: T.Y. Polyakova.

PURPOSE: This book is intended for scientific and technical per-

sonnel in the field of metallurgy.

COVERAGE: This is a collection of articles on certain aspects of

Soviet metallurgy. The book is dedicated to Academician

Ivan Pavlovich Bardin on the occasion of his 75th birthday. The

book is divided into seven parts. The first part consists of

two articles presenting a brief account of the history and

professional activity of the Soviet metallurgist. It includes an

article by John Chipman, Nicholas Grant, and John Elliott (M.I.T.,

USA) describing their meeting with Bardin in Moscow and also his

visit to the United States. The second part consists of three

articles and deals with raw materials and fuels for the Soviet

metallurgical industry. The third part represents the major

portions of the book. It consists of 25 articles dealing with

the various aspects of the metallurgy of pig iron and steel.

The fourth part consists of two articles treating the metal-

lurgy of nonferrous metals. The fifth part consists of three

articles on the forming of metals. The sixth part consists of

eight articles discussing certain aspects of physical metal-

lurgy. The last part deals with general problems in the field

of metallurgy. References are given after each article. No

personnelities are mentioned.

TABLE OF CONTENTS:

Modern Problems in Metallurgy

SOV/1728

FORGING OF METALS

Pavlov, I.M. [Corresponding Member, AS USSR, Doctor of Technical
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The Problem of Metal Economy in the Rolling Industry 459

Teodorov, A.I. [Corresponding Member, AS USSR, Tselnykh (Con-
tral Scientific Research Institute of Technology and Machin-
ery) Tskhometype Mills Featuring New Rolling Processes 471

Aleksandrov, P.A. [Doctor of Technical Sciences, Ukrainian
Institute of Metals]. Modernization of Blooming Mills 500

SCIENCE OF METALS

Beshvar, A.A. [Academician], M.Ye. Krivt, and Z.A. Sviderskaya
[Candidate of Technical Sciences, Metallurgical Institute
Imeni A.A. Baykov, AS USSR]. The Nature of Strengthening
Magnesium Alloys of the Mg-Al-Ca System at Elevated
Temperatures 513

Card 10/2

ALEKSANDROV, P.A., kand. tekhn. nauk.

Structure and mechanical properties of cast steel in blooming
mill ingots. Trudy Ukr. nauch.-issl. inst. met. no.4:165-178
'58.

(Steel ingots--Testing)

(MIRA 12:3)

SOV/137-59-3-6745

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 258 (USSR)

AUTHORS: Dolzhenkov, F. Ye., Aleksandrov, P. A.

TITLE. The Resistance to Deformation of Metal During Rolling at Large Ratios of the Height of the Rolled Billet to the Diameter of the Rolls (Soprotivleniye metalla deformatsii pri prokatke s bol'shimy otnosheniyami vysoty raskata k diametru valkov)

PERIODICAL: Byul. nauchno-tekhn. inform. Ukr. n.-i. in-t metallov, 1958, Nr 5, pp 42-49

ABSTRACT: A presentation of the results of an investigation dealing with the resistance to deformation of metal (RDM) during rolling at large ratios of the height of the rolled billet to the diameter of the rolls. Experiments were carried out in a 150-mm laboratory rolling mill on specimens of commercially pure Pb and steel containing 0.4% C. Rolls with polished, machined, and knurled surfaces were employed. At constant roll diameters, the basic factor determining the change in specific pressure (SP) is the thickness of the strip. The SP is at a minimum when the ratio H/t_d approaches the value of 2.0, i.e., the value corresponding to an approximately uniform distribution of

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SOV/137-59-3-6745

The Resistance to Deformation of Metal During Rolling at Large Ratios (cont.)

compressive deformation throughout the cross-sectional height. Reducing or increasing the value of the ratio H/ℓ_d results in an increased SP. An increase in the relative reduction during rolling of thick strips tends to reduce the SP. Central layers of a thick strip subjected to small reductions are severely strained longitudinally, which, obviously, requires the application of additional forces and increases the values of the mean SP. When $H/\ell_d \approx 2.0$, the inactive central layer of metal is absent and no additional force is necessary. The RDM is at a minimum in this instance. In the case of rolling of blanks with a barrel-shaped cross section, when $H/\ell_d < 2$, increasing the degree of reduction will aggravate the effect of the three-dimensional stressed state and will increase the RDM. Under severe reductions it may occur that the angle of bite will exceed the friction angle and, as a result, longitudinal tensile stresses tending to reduce the longitudinal compressive stresses and the RDM will appear on a section of the contact arc extending from α to β . The SP is almost independent of the coefficient of friction during rolling of thick strips; in certain instances, a slight reduction in the SP was obtained when coarser rolls were used. When $H/\ell_d < 2.0$, the SP increases as the coefficient of friction is increased. Knurling of the first two or three roll passes will increase the degree of reduction, enhance the working of the ingot throughout its height, and improve the conditions of bite, etc.

Card 2/2

P. G.

SOV/137-59-3-6791

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 267 (USSR)

AUTHORS: Vorontsov, N. M., Aleksandrov, P. A.

TITLE: On the Wear Resistance of Steel Reducing-mill Rolls (O stoykosti stal'nykh valkov obzhimnykh stanov)

PERIODICAL: Byul. nauchno-tekhn. inform. Ukr. n-i. in-t metallov, 1958, Nr 6, pp 44-66

ABSTRACT: The principal laws governing the wear (W) of rolls (R) during hot rolling were studied on a laboratory installation in which a specimen made of steel 45 or 55Kh was securely mounted on a rotary shaft (driven by a motor through a set of reduction gears and a chain drive) and was forced under different degrees of pressure against a heated (~~1000~~-1050°C) rod made of rail steel of constant chemical composition; preparatory to the experiment, the contact surfaces of the specimen and the rod were ground. The W was determined by the loss of weight of the specimen after a definite number of revolutions or after a specified distance traveled. The formation of a mesh of cracks on the surface of the R's under shop conditions was investigated on the blooming, slabbing, and reducing stands of the

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SOV/137-59-3-6791

On the Wear Resistance of Steel Reducing-mill Rolls

plants "Azovstal'", im. Kirov plant, "Dneprospetsstal'", and "Zaporozhstal'". The R's in these mills were made of steels 55Kh, 40KhN-50KhN, and 60KhG. It was established that the R's of hot-rolling mills operate under conditions of thermo-mechanical fatigue and are subjected to abrasion by the metal being rolled as well as to the action of corrosion-oxidation processes. The type of cooling (C) employed markedly affects the W of the metal component subjected to friction at high temperatures: Water C increases the W of specimens made of steel 45 by a factor of 2.4 and that of specimens of steel 55Kh by a factor of 7; if the water is subsequently removed by an air blast, the W is reduced by a factor of 1.5 and 2.5 times, respectively. Most favorable operating conditions with regard to W prevail during operations in which the R's are cooled by compressed air. An investigation of W in water-cooled R's demonstrated that its nature and intensity vary with the heating conditions for the surface layer: Abrasion W is the basic form of W in operations of rolling without preheating; at temperatures of 300-500° oxidation W is prominent, while thermal W is predominant at elevated temperatures. Minimum W, which was observed at temperatures ranging from 400 to 500°, increases linearly as the temperature is further increased. The W also becomes greater as the rate of slippage is reduced. A mesh of cracks forms on the R body as a result of thermo-mechanical fatigue of the metal (action of variable stresses

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SOV/137-59-3-6791

On the Wear Resistance of Steel Reducing-mill Rolls

due to repeated heating and C), pressure of metal against the R's, and the flexure of the latter. The propagation of the cracks is nonuniform being a function of the surface finish, notching, the temperature of the metal being rolled, the pressure, the intensity and type of C, and the slippage of metal along the surface of the R's. The thermo-mechanical fatigue strength may be increased by means of hardfacing the R surface as well as by means of strain hardening it with special rollers. The most rational approach is to combine the two methods by cold working the bottoms of the passes with knurled and the sides with plain rollers.

V. D.

Card 3/3

ALEKSANDROV, P.A., doktor tekhn.nauk

Internal defects in blooms, slabs and blanks. Trudy Ukr.nauch.-
issl.inst.met. no.5:139-155 '59. (MIRA 13:1)
(Steel castings--Defects) (Rolling (Metalwork))

VORONTSOV, N.M., inzh.; ALEKSANDROV, P.A., doktor tekhn.nauk

Some results of studying the wear resistance at high temperatures of steel rolling mill rolls. Trudy Ukr.nauch.-issl.inst.
met. no.5:176-183 '59. (MIRA 13:1)
(Rolls(Iron mills)--Thermal properties)
(Mechanical wear)

ALEKSANDROV, P.A.; DOLZHENKOV, F.Ye.; VORONTOV, N.M.; BAT', Yu. I;
TSUKANOV, G.E.; SAZONENKO, V.P.; CHEPELEV, P.M.; KRUGLYAK, P.F.

Working out the grooving of rolls and auxillary equipment for
the rolling of Z-shaped pile planks. Trudy Ukr. nauch.-issl.
inst. met. no.6:133-156 '60. (MIRA 14:3)
(Rolls(Iron mills))(Rolling(Metalwork))

PIRYAZEV, D.I.; ALEKSANDROV, P.A.

Unit pressures in hot rolling and the analysis of formulas and
methods for their determination. Trudy Ukr. nauch.-issl. inst.
met. no.6:157-170 '60. (MIRA 14:3)
(Rolling (Metalwork))

ALEKSANDROV, P.A., doktor.tekhn.nauk; BESEDIN, P.T., kand.tekhn.nauk;
FILONOV, I.G.; SOROKIN, A.A.; KARPUNIN, A.M.; CHEPELEV, P.P.

Tempering rail heads along the total length. Put' i put.khoz. 4
no.8:15-16 Ag '60. (MIRA 13:7)

1. Ukrainskiy institut metallov (for Aleksandrov, Besedin).
2. Glavnyy inzhener Metallurgicheskogo zavoda im. Dzerzhinskogo
(for Filonov). 3. Nachal'nik tekhnicheskogo otдела Metallurgicheskogo
zavoda im. Dzerzhinskogo (for Sorokin). 4. Nachal'nik metal-
lurgicheskogo zavoda im.Dzerzhinskogo (for Karpunin). 5. Nachal'nik
rel'sobalochnogo tsekha Metallurgicheskogo zavoda im. Dzerzhinskogo
(for Chepelev).

(Railroads--Rails)

(Tempering)

ALEKSANDROV, P.A.; GUNIN, I.V.; FILIPPOV, I.N.

Properties of lightweight I-bars and channels, and special
characteristics of their manufacture. Stal' 20 no. 7:619-
623 J1 '60. (MIRA 14:5)

1. Ukrainskiy institut metallov.
(Rolling (Metalwork)) (Girders)

S/137/61/000/012/080/149
A006/A101

AUTHORS: Aleksandrov, P. A., Slin'ko, A. A.

TITLE: Calibration and rolling of blanks for guide blades of steam turbines

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 7, abstract 12D46
("Sb. tr. Ukr. n.-i. in-t metallov" 1961, no. 7, 153-164)

TEXT: When manufacturing blades from a rectangular blank by machining, about 85% of stainless steel is rejected as chips and the external high-quality metal layer is removed. Cold rolling, a process which is sometimes employed, is complicated and labor-consuming. A process was assimilated on the 550 mill for the hot rolling of double turbine blade sections, which reduced the production price by 44% and raised the factor of metal utilization by 2.5. The initial temperature of rolling is 1,050°C, the final temperature is 920 - 930°C. The initial blank has a rectangular section and tolerances in the width of ± 5 mm. From 2 tested methods of doubling the turbine blade sections the most effective one proved to be the doubling by the thick parts, assuring more uniform deformation, better filling of the grooves, and reducing the size of cut-off ends. The design of the roll-adjacent fixtures is simple; the section grooves are of

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Calibrating and rolling of blanks ...

S/137/61/000/012/080/149
A006/A101

the closed type. Cutting of the shaped sections does not present any difficulties. With the aid of high-quality hard rolls and improved heating methods, the factor of metal utilization can be raised, in the case of a shaped blank, up to 0.8 - 0.85 on account of a further reduction of allowances for machining.

B. Ilyukovich

[Abstracter's note: Complete translation]

Card 1/2

ALEKSANDROV, P.A., doktor tekhn.nauk; FILIPPOV, I.N., kand.tekhn.nauk

Improving roll grooving for shaped sections. Met. i gornorud.
prom. no.2:23-29 Mr-Ap '62. (MIRA 15:11)

1. Ukrainskiy institut metallov.
(Rolls (Iron mills))

ALEKSANDROV, P. A.

PHASE I BOOK EXPLOITATION

SOV/6044

Rokotyan, Ye. S., Doctor of Technical Sciences, Ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook)
v. 2. Moscow, Metallurgizdat, 1962. 685 p. 8500 copies
printed.

Authors: P. A. Aleksandrov, Doctor of Technical Sciences;
V. P. Anisiforov, Candidate of Technical Sciences; V. I. Bayrakov,
Candidate of Technical Sciences; M. V. Barbarich, Candidate
of Technical Sciences; B. P. Bakhtinov, Candidate of Technical
Sciences [deceased]; B. A. Bryukhanenko, Candidate of Economic
Sciences; M. V. Vasil'chikov, Candidate of Technical Sciences;
A. I. Vitkin, Doctor of Technical Sciences; S. P. Granovskiy,
Candidate of Technical Sciences; P. I. Grudev, Candidate of
Technical Sciences; I. V. Gunin, Engineer; M. Ya. Dzugutov,
Candidate of Technical Sciences; V. G. Drozd, Candidate of
Technical Sciences; N. F. Yermolayev, Engineer; G. M. Katsnel'son,
Candidate of Technical Sciences; M. V. Kovynev, Engineer;
M. Ye. Kugayenko, Engineer; N. V. Litovchenko, Candidate of
Technical Sciences; Yu. M. Matveyev, Candidate of Technical

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SOV/6044

Rolling Industry; Handbook

institutes, and planning and design organizations. It may also be used by students at schools of higher education.

COVERAGE: Volume 2 of the handbook reviews problems connected with the preparation of metal for rolling, the quality and quality control of rolled products, and designs of roll passes in merchant mills. The following topics are discussed: processes of manufacturing semifinished and finished rolled products (the rolling of blooms, billets, shapes, beams, rails, strips, wire, plates, sheets, and the drawing of steel wire), hot-dipped tin plates, lacquered plates, floor plates, tubes made by different methods, and special types of rolled products. Problems of the organization of rolling operations are reviewed, and types of rolled products manufactured in the USSR are shown. No personalities are mentioned. There are no references.

TABLE OF CONTENTS: [Abridged]:

Card 3/ 4

S/124/63/000/002/043/052
D234/D308

AUTHORS: Aleksandrov, P.A. and Saprygin, Kh.M.

TITLE: Investigation of the effect of nonuniformity of deformation during reduction of ingots on the mechanical properties of steel

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 2, 1963, 62, abstract 2V513 (Sb. tr. Ukr. n.-i. in-t metallov, 1962, no. 8, 123-132)

TEXT: The authors investigated blooms and rails rolled from 4.35 ton ingots of Bessemer steel (0.34 C, 0.97 Cr, 0.81% Mn). Longitudinal and transversal specimens were cut out and subjected to tension and impact tests. It is shown that in blooms with large section the characteristics of plasticity, the impact viscosity and the yield and strength limits decreased towards the interior. With increasing reduction the plasticity characteristics increase over the whole section in longitudinal specimens and in surface layers only in transversal specimens. The degree of working of the metal

Card 1/2

Investigation of the effect ...

S/124/63/000/002/043/052
D234/D308

is not determined by the magnitude of general elongation but by the magnitude of reduction, the diameter of rolls and the thickness of reduced section.

[Abstracter's note: Complete translation]

Card 2/2

SANDLER, N. I., kand. fiziko-matematicheskikh nauk; MONAKHOVA, L. V.,
kand. tekhn. nauk; KURMANOV, M. I., kand. tekhn. nauk;
ALEKSANDROV, P. A., doktor tekhn. nauk; SABIYEV, M. P., inzh.

Defects in manganese-aluminum steel slabs. Met. i gornorud.
prom. no.1:62-66 Ja-F '63. (MIRA 16:4)

1. Ukrainskiy institut metallov.

(Steel ingots—Defects)

SLIN'KO, A.A.; ALEKSANDROV, P.A.

Forced increase in width and average elongation in rolling with
irregular reduction in height. Izv. vys. ucheb. zav.; chern.
met. 6 no.7:106-111 '63. (MIRA 16:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov.
(Rolling (Metalwork))

ALEXANDROV, I. A., doktor tekhn. nauk [deceased]; GOLUBOV, M.M.;
TELESKO, A.M.; TRALICH, K.M.

Ways of decreasing the crescent shape of strip for the manufacture
of helically welded pipe. Met. i gornorud. prom. no.4:46-47 JI.3g
1964. (MIRA 18:7)

ALEKSANDROV, P.A., doktor tekhn. nauk [deceased]; FILIPPOV, I.N.

Mastering the production of lightweight rolled shapes. Sbor.
trud. UNTIM no.9:173-185 '64 (MIRA 18:1)

ALEKSANDROV, P.A., doktor tekhn. nauk [deceased]; GOLUBOV, M.M.; TIMOFEYEV,
D.I.; SOKOLOV, B.A.

Investigating regularities of shape changes of sheet work-
pieces during rolling in horizontal and vertical mills.

Sbor. trud. UNIIM no.9:223-239 '64

(MIRA 18:1)

5
S/019/61/000/015/035/101
A154/A126

AUTHORS: Sladkomshteyev, V.Y.; Kuritskiy, M.A.; Shatagin, O.A.; Karasevich,
A.N.; Aleksandrov, P.A.; Vartazarov, M.A.; Korsun, V.A.; Guz',
S.I.

TITLE: A machine' for horizontal continuous casting of metals and alloys

PERIODICAL: Byulleten' izobreteniy, no. 15, 1961, 35

TEXT: Class 31c, 21. No. 140176 (695546/22 of January 30, 1960). 1) A machine for horizontal continuous casting of metals and alloys with the use of a graphite crystallizer, secondary cooling, a drawing stand and a device for cutting the cast billet into measured lengths, distinguished by the fact that, in order to obtain high-quality castings, the machine uses a graphite crystallizer with a heated receiving section and a cooled crystallization delivery space. 2) A machine as in 1, distinguished by the fact that, in order to obtain tubular billets of different profiles, a graphite mandrel is mounted in the cooled space of the crystallizer.

Card 1/1

ALEKSANDROV, P. D.

DECEASED

1964

C/1964

LEATHER

1. ALEKSANDROV, P. K.
2. USSR (600)
4. Welding
7. Informative announcement. Avtog. delo. 24, No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Unclassified.

SOV-135-58-2-16/18

AUTHORS: Alaksandrov, P. K., Learned Secretary and Fel'dman, B.Z.,
Engineer

TITLE: The Rostov Scientific Technical Conference on Progressive
Welding Methods (Rostovskaya nauchno-tekhnicheskaya konfe-
rentsiya po progressivnym metodam svarki)

PERIODICAL: Svarochnoye proizvodstvo, 1958, Nr 2, p 47 (USSR)

ABSTRACT: A scientific-technical Conference on progressive welding
methods was convened in October 1957 at Rostov-on-the-Don
(Rostov na Donu) by the Rostov Council of National Economy
and the welding section of the Rostov Oblast' Administration
of NTO Mashprom. The Conference heard the following reports:
B. Z. Fel'dman, Senior Engineer, on the stage of welding
practice in the Rostov economic region; I. D. Davydenko,
Chief of the Welding Section at the "Krasnyy Kotel'shchik"
Plant, on one-pass electric slag welding; P. M. Sapov,
Laboratory Head of the Rostsel'mash Plant, on conveyer lines
and welding equipment; A. I. Zelenov, Candidate of Technical
Sciences, on cold welding of ^{cast}iron; V. T. Zolotykh, Candi-
date of Technical Sciences, on automatic multiple-electrode plug
welding with electric rivets; V. M. Korsunov, Engineer, on
butt welding of pipes in oxygen; A. A. Shapiro, Senior

Card 1/2

SOV-135-58-2-16/18

The Rostov Scientific Technical Conference on Progressive Welding Methods

Engineer, on briquetting of metal chips by contact welding. The Conference decided to organize brigades for analysing the situation of the welding practice in the Rostov region, approved the Sovnarkhoz decision on the making of "EV" alloys, and recommended excursions to various plants and the issue of technical information.

ASSOCIATION: Rostovskoye oblastnoye pravleniye NTO Mashprom (The Rostov Oblast' Administration of NTO Mashprom)

Card 2/2

1. Welding--USSR

AUTHOR: Aleksandrov, P.K., Engineer SOV-128-58-7-5/20

TITLE: Scientific-Technical Conference of Foundrymen of the Rostov Economic Region (Nauchno-tekhnicheskaya konferentsiya liteyshchikov Rostovskogo ekonomicheskogo rayona.)

PERIODICAL: Liteynoye proizvodstvo, 1958, Nr 7, p 11 (USSR)

ABSTRACT: The conference was organized by the Foundry Section of the Central and Rostov Oblast Boards of NTO Mashprom and the Sovnarkhoz of the Rostov economic region, and prepared by these two organizations in a new way - in close personal contact with leading foundry specialists of the USSR: D.P. Ivanov, N.G. Girshovich, Yu.A. Nekhendzi, P.P. Berg, L.M. Mariyenbakh, A.F. Landa, F.N. Tavadze and others. The conference heard the following reports: Professor N.G. Girshovich; Chief Metallurgist of the Rostsel'mash Plant, L.M. Baryshevskiy; Chief metallurgist of Taganrogskiy kombinovyy zavod (Taganrog Harvester Plant), V.M. Zlaman; and the Chief Metallurgist of the plant "Krasnyy Aksay", G. Ye. Shifrin; on "News in Theory and Practice of the Production of Malleable Iron"; professor L.M. Mariyenbakh on "Prospective Development of Melting Aggregates for Pro-

Card 1/2

SOV-128-58-7-5/20
Scientific-Technical Conference of Foundrymen of the Rostov Economic Region.

duction of Grey and Malleable Cast Iron". Furnace Bureau Chief of the Rostsel'mash Plant, P.F. Sabaneyev, on work in this field at the plant, Chief Engineer of Radiatornyy zavod (Radiator Plant), L.A. Agafonov; Professor A.F. Landda, on "Development Ways of Some Technologic Processes and Improvement of the Quality of Iron Castings", Candidate of Technical Sciences I.I. Khoroshev, on "Some Laws in the Theory and Practice of the Modification Process and Its Effect on Increased Annealing-Rate of Malleable Cast Iron". Prominent participants arrived in Rostov -na-Donu several days before the conference and visited several large plants where they gave consultations and talked with the foundrymen. The total number of participants at the conference was about 200. Delegates from the Sovnarkhozes of Gor'kiy, Voronezh, Stalino, Latvia, Moscow were present.

1. Foundries---USSR 2. Metals---Casting

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PHASE I BOOK EXPLOITATION

SOV/4589

Aleksandrov, Petr Kuz'mich

V pomoshch' molodomu elektrosvarshchiku (An Aid to the Young Electric Weldor)
[Rostov-na-Donu] Rostovskoye knizhnoye izd-vo, 1959. 59 p. 7,000 copies printed.

Ed.: I.V. Zherebkov; Tech. Ed.: N.A. Popova.

PURPOSE: This booklet is intended for graduates of secondary schools who wish to qualify as electric welding operators.

COVERAGE: The booklet presents the basic principles of electric welding and contains information on welding machines and equipment. The author includes information on metals, their composition, weldability, and hardenability. The description of electric arc welding is accompanied by schematic diagrams of some welding machines and equipment, with information on their operation and uses. No personalities are mentioned. There are 9 references, all Soviet.

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Development of Electric Arc Welding of Metals

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25 (1)

SOV/135-59-4-16/18

AUTHORS: Aleksandrov, P. K., Scientific Secretary; Fel'dman, B. Z.,
Chief Engineer of the Technical Department

TITLE: The Rostov Sovnarkhoz Welders Discuss Welding Industry
Development. (Svarshchiki Rostovskogo sovnarkhoza
obsuzhdayut voprosy razvitiya svarochnogo proizvodstva)

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 4, pp 44 - 45

ABSTRACT: Information is presented on welding conferences in the
Rostov oblast' since the beginning of the Soviet organiza-
tion of industry after the XXI Communist party congress.
There was a conference at the plant "Rostsel'mash" in
September 1958 on general prospective development, with
reports by: Engineer Kochka "On Further Introduction of
Welding into Production Practice"; Engineer Mironov on
"Mechanization of Assembly Welding Work and Modernization
of the Plant's Equipment"; Engineer Smirnov on "High-
Efficiency Electrodes and their Prospective Use at the
Plant". A conference was organized at the plant "Prod mash"
on the problem of using natural gas for cutting metals,

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The Rostov Sovnarkhoz Welders Discuss Welding Industry Development

with a demonstration of the process, which is extensively used at other plants of the Rostov Sovnarkhoz system. A conference at the Taganrog plant "Krasnyy kotel'shchik" discussed the problems of electric slag welding and contact welding. It is mentioned that nearly all existing welding processes are extensively used at all plants and construction projects in the Rostov oblast'. Welded work makes up 60% of the production of the machine building plants. It is emphasized that maximum automation and mechanization of welding and the auxiliary processes is the task of the scientific and practical welders and the welders innovators. More detailed information is given on the conference of December 1958, concerning technical development of welding and the introduction of new welding technique at the oblast' plants during 1959-1965, with 98 practical welding specialists and scientific workers participating. At this conference, Engineer B. Z. Fel'dman (Technical Department of the Sovnarkhoz) spoke of the success achieved at the "Rostsel'mash" and the Taganrogskiy kombaynovyy zavod (Taganrog Combine Harvester Plant). There, the production

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of the self-propelled "SK-3" combine has been mastered, the necessary welding equipment has been completed, and the auxiliary operations mechanized. The plant "Krasnyy koteln-shchik" is using natural gas instead of acetylene for cutting, has mechanized 50% of the gas cutting work and is using oxygen jets in the butt welding of pipes by the contact-flash method (to intensify the welding process and remove the metal ridge inside pipes). The plant "Krasnyy gidropress" has had good results in using welding in CO₂ in the production of hydraulic systems for combine harvester plants. The entire welding production is to be doubled during the seven-year plan as compared with 1958, coating by welding is to be increased by 2.5 times, the production of electrodes by 6 times (the lack of good electrodes and wire is presently causing great difficulty) flux by 1.5 times, and the means of mechanization by 2.2 times. The use of contact welding will have to be increased 230%, and welding in CO₂ will also have to be used extensively.

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The Rostov Sovnarkhoz Welders Discuss Welding Industry Development

Engineer I. D. Davydenko, Candidate of Technical Sciences and Stalin Prize Laureate (plant "Krasnyy kotel'shchik")/ read a report "On the Application of New Steel Grades in the Production of Boilers, and on the Technology of Welding These Steels". His plant is starting the use of the electric slag welding process for steel "1Kh18N9T" and is studying the welding of austenitic and other steels and alloys. Engineer V. M. Korsunov (plant "Krasnyy kotel'shchik") and Engineer V. T. Kochka ("Rostsel'mash") told of their plants experience in the reports "The Ways of Mechanizing and Automating Welding". Engineer Barilov ("Rostsel'mash") and Engineer Zadorozhnyy (NIITM) presented reports on "General Experience with Welding in Carbon Dioxide at the Sovnarkhoz' Plants". Candidate of Technical Sciences A. I. Zelenov of the Rostovskiy institut inzhenerov zheleznodorozhnogo transporta (Rostov Institute of Railroad Engineers), and Engineer P. M. Sapov, Chief of the "Rostsel'mash" Central Plant Laboratory, made reports on "Extending the Volume of Coating Work, and Introducing Modern Methods of Restoring Parts and Tools".

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The Rostov Sovnarkhoz Welders Discuss Welding Industry Development

Engineers V. I. Strots and I. I. Fomin delivered reports on "Development and Use of Stamped-Welded Designs to Replace the Cast and Forged, as a Way to Reduce the Weight of Machines". Chief Engineer of "Rostovenergoremont", I. I. Izrailevich, told the conference of the experience of the "Rostovenergoremont" in the repair and modernization of electric power plants, and of its work in improving existing and the creation of new equipment for inspecting welded joints in critical metal structures. Engineer V. I. Reznikov of Novocherkasskiy elektrovostroitel'nyy zavod (Novocherkassk Electric Locomotive Plant) reported on the automation of welding processes in the production of electric locomotives. The conference followed the example of the Moscow welders and appealed to all specialists of the Rostov oblast' to fulfill their practical obligations in the mechanization of welding and the automation of welding processes in mass production.

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The Rostov Sovnarkhoz Welders Discuss Welding Industry Development SOV/135-59-4-16/18

ASSOCIATION: Rontomashprom; Rostov Sovnarkhoz.

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ALEKSANDROV, P.K.

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held in Rostov-on-Don. Metalloved. i term. obr. met. no.5:62 My
'61. (MIRA 14:5)

1. Uchenyy sekretar' Rostovskogo oblastnogo pravleniya nauchno-
tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti.
(Metals--Congresses)

ALEKSANDROV, P.K. inzh.

Conference on the design and use of powered equipment for assembling
and welding operations. Svar. proizv. no.4:45 Ap '63. (MIRA 16:5)
(Machinery industry--Congresses)
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ALEKSANDROV, P.K.

Readers' conference. Avtom. svar. 16 no.2:91 F '63.
(Welding—Periodicals)

(MIRA 16:4)

ALEKSANDROV, P. M., KLEVAMKIN, V. N., BORISKIN, M. M., LIL'F, G. M.,
ZIL'BERMINTS, I. V., GUDNEVA, O. A., POPOV, S. G., DENISENKO, V. K.,
KOROVIN, F. T., GUTSEVICH, A. V., FEREFIL'YEV, P. P., POGODINA, E. A.,
FEDOROV, M. N., SPRERANSKAYA, V. N., SIYANITSKIY, F. M. and SHUSTROV, A. K.

"The Effectiveness of a Chemical Method for Combatting Arthropods
over Large Areas from Airplanes."

Tenth Conference on Parasitological Problems and Diseases with Natural
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Sciences, USSR, Moscow-Leningrad, 1959.

(Leningrad - Moscow)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; SHUL'ZHENKO, V.M.; ALEKSANDROV, P.M.;
LEBEDINSKIY, V.A.; KAVERINA-FIRGANG, K.G.; KOZNETSOVA, V.I.;
BEKKER, M.L.; VORONIN, Yu.S.

Search for effective chemical vaccines against some zoonoses.
Report No.3: Development of a chemical plague vaccine and its
experimental test in animals. Zhur. mikrobiol., epid. i immun.
4 no.4:66-71 Ap '63. (MIRA 17:5)

ALEKSANDROV, P.N.

CHERNUKH, A.M., doktor meditsinskikh nauk; SOLOV'YEV, V.N., kand.med.nauk;
ALEKSANDROV, P.N.

Some peculiarities of experimental antibiotic therapy of infectious
inflammations. Sov.med. 21 no.9:26-31 S '57. (MIRA 11:1)

1. Iz laboratorii eksperimental'noy terapii Instituta normal'noy i
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meditsinskikh nauk SSSR.

(MICROCOCCUS PYOGENES, infect.

aureus, eff. of antibiotic ther. in rats & mice)

(ANTIBIOTICS, eff.

on exper. micrococcus pyogenes aureus infect.)

ALEKSANDROV, P.H.

Some experimental data on the effect of antibiotics on infectious and aseptc inflammation [with summary in English]. Antibiotiki
3 no.1:91-96 Ja-F'58 (MIRA 11:5)

1. Laboratoriya eksperimental'noy terapii Instituta normal'noy i patologicheskoy fiziologii AMN SSSR.

(INFLAMMATION, experimental,

eff. of antibiotics on infect. & aseptic inflamm.

(Rus))

(ANTIBIOTICS, effects.

on exper. inflamm.prod. by infect. & aseptic methods

(Rus))

ALEKSANDROV, P. N., Candidate Med Sci (diss) -- "General and local reactions of the organism under conditions of experimental chemotherapy of inflammation". Moscow, 1959. 14 pp (Acad Med Sci USSR, Inst of Normal and Pathological Physiology of the Acad Med Sci USSR, Inst of Pharmacology and Chemotherapy of the Acad Med Sci USSR) (KL, No 23, 1959, 171)

ALEKSANDROV, P.N. (Moskva)

Effect of preliminary cooling on the course of infectious and aseptic inflammation and on the effectiveness of experimental antibiotic therapy. Pat. fiziol. i eksp. terap. 4 no.3:20-23 My-Je '60. (MIRA 13:7)

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(ANTIBIOTICS)

CHERNUKH, A.M.; NEVSTRUYEVA, V.S.; ALEKSANDROV, P.N.

Some experimental data on the effect of various functional conditions of the organism on the concentration of oxytetracycline in various organs. Antibiotiki 5 no.2:41-44 Mr-Ap '60. (MIRA 14:5)

1. Otdel eksperimental'noy khimioterapii (zav. - prof. A.M.Chernukh)
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(TERRAMYCIN)

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(ANTIBIOTICS) (EMBRYOLOGY—BIRDS)

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A 24-hour differential actograph. Pat. fiziol. i eksp. terap.
6 no.3:73-74 My-Je'62 (MIRA 17:2)

1. Iz otdela khimioterapii (zav. - prof. A.M.Chernukha) Instituta farmakologii i khimioterapii (direktor - deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov) AMN SSSR.

ALEKSANDROV, P.N. (Moskva.)

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(MIRA 17:8)

1. Iz otdela khimioterapii (zav. - prof. A.M. Chernukh) Instituta farmakologii i khimioterapii (dir. - deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov) AMN SSSR.

CHERNUKH A.M.; YUSHCHENKO, N.A.; ALEKSANDROV, P.N. (Moskva)

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(MIRA 17:3)

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tuta farmakologii i khimioterapii (dir. - deystvitel'nyy
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ALEKSANDROV, P.N.; TOLMACHEVA, N.S.; YUSHCHENKO, N.A.

Effect of temperature factors on the concentration of tetracycline in the blood and organs of white rats. Antibiotiki 7
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1. Otdel khimioterapii (zav. - prof. A.M.Chernukh) Instituta
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1. Otdel khimioterapii (zav.- prof. A.M. Chernukh) Instituta
farmakologii i khimioterapii (dir.- deystvitel'nyy chlen AMN
SSSR prof. V.V. Zakusov) AMN SSSR, Moskva.

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CHERNUKH, A.M.

Method for preliminary estimation of teratogenic activity of
pharmacological preparations on chicken embryos. Vest. AMN
SSSR 20 no.3:78-81 '65. (MIRA 18:7)

1. Institut farmakologii i khimioterapii AMN SSSR, Moskva.